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ABSTRACT

This study was designed to provide insight regarding the psychological repercussions for students who repeatedly fail the Georgia Basic Skills Test (GBST), but are not identified as educationally handicapped. This criterion referenced test is designed to assess competency on designated minimum skills. A random sample of tenth graders were administered the Piers-Harris Children's Self-Concept Scale prior to being initially administered the GBST, or exit exam, shortly after receiving the test results, and two months after their initial exit exam administration. A two-way analysis of variance was the statistical model used for data analysis. Each of the research hypotheses was supported by the study. Results indicate that students' exit exam passing status produced significant differences in initial examinees' self-concept scores; students who initially fail either one or both of the exit exam skill areas have significantly lower self-concept scores than those who initially pass both skill areas; and students' passing status on the exit exam produces significant differences in self-concept change scores. (Author/DWH)

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THE EFFECTS OF EXIT-EXAM FAILURE ON STUDENTS' SELF-CONCEPT

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ABSTRACT

This study is designed to provide some insight regarding the psychological repercussions for students who repeatedly fail the Georgia exit exam, but who are not identified as educationally handicapped. A random sample of 248 tenth graders were administered the Piers-Harris Children's Self-Concept Scale prior to being initially administered the exit exam, shortly after receiving results from their initial exit exam administration, and two months after their initial exit exam administration. Results show that: (1) students' exit exam passing status produced significant differences in initial examinees self-concept scores; (2) students who initially fail either one or both of the exit exam skill areas have significantly lower self-concept scores than those who initially pass both skill areas; and (3) students' passing status on the exit exam produces signifcant differences in self-concept change scores. The findings also suggest further areas for research.

THE EFFECTS OF EXIT-EXAM FAILURE ON STUDENTS' SELF-CONCEPT

INTRODUCTION

In response to the public demand for educational accountability, the State of Georgia has joined other public school districts throughout the country in accepting the challenge of verifying its students' competencies. As a national trend in education, this verification process has been subsumed under the label of Competency Based Education (CBE). Although the criteria for determining school progression varies, the "exit exam" is gradually becoming the ultimate basis for certifying the successful completion of high school. This validation is subsequently documented by the high school diploma.

Few would question the fact that in America the high school diploma plays a vital role in determining the future quality of one's life, since it is directly linked to a myriad of other opportunities. To the extent that the exit exam serves as the primary basis for determining who receives a high school diploma, it serves as a barometer for forecasting the future quality of life for today's adolescents. Currently, seven of the fourteen states that are members of the Southern Region Educational Board have adopted exit exams as a criteria for graduation from high school (Cornett, 1983).

Georgia's CBE program went into effect at the beginning of the 1982-83 academic year. By action of the State Board of Education, all students who had not progressed to grade 10 or beyond by the beginning of the 1982-83 school year were bound by the policy. The Georgia exit exam, commonly called the Georgia Basic Skills Tests (GBST), is a criterion-referenced test designed to assess competency on designated minimum reading and mathematics skills. In order to receive a high school diploma, students bound by the policy must pass both skill areas of the GBST (i.e., reading and mathematics) in addition to fulfilling the regular graduation requirements. The test is initially administered during

the fall of a student's tenth-grade year. Students failing the initial administration are retested in the spring as well as the subsequent fall and spring of their eleventh- and twelfth-grade years. Thus, each student receives six opportunities to pass the test prior to the time for his/her class to graduate. Students who are unable to pass the GBST by the spring of their twelfth-grade year will receive a certificate of attendance rather than a high school diploma. Though exit exams have begun to play a vital role in students' lives, little is known about the psychological impact that they have on students who fail to overcome this initial life hurdle.

The most probable part of the human psyche upon which the educational development known as the exit exam is likely to have impact is the self-concept. Interest in the examination of the self was initiated by James (1890) who determined that the self was comprised of three parts—the material, social, and maternal self. Symonds (1951) views the self as comprised of four parts that refer to the body, mind, and bodily processes as they are observed and reacted to by the individual. Jersild (1952) conceptualizes the self as a summation of all a person's experiences. Nobels (1973) presents a view that the Black self-concept is based upon group identity which is determined by the African concept of self. Though each defines the self by using differing terminology, they each denote that the self is based upon the attitudes or beliefs an individual develops about his/her attributes. A person's self-concept thus is either positive or negative as a result of evaluative interactions. An evaluative interaction which has the potential for a lasting impact is the high school exit exam.

The present study is designed to provide some insight on the psychological repercussions for students who repeatedly fail the Georgia exit exam, but who are not identified as being educationally handicapped. What happens to the self-image and academic motivation of those students who are unable to meet this standard? Does the exit exam serve as an added incentive or does it merely crush the egos of the students who must overcome the greatest odds and, therefore, need the most assistance? The

proposed study will concentrate upon the impact of the Georgia CBE program for students within the Atlanta Public School System.

Brookover et. al. (1964) examine three hypotheses concerning the self-concept. They find that self-concept of ability is significantly and positively related to academic performance, that it is differentiated into specific subareas which are better predictors of achievement than general self-concept, and that it is positively related to the perceived evaluations of significant others. Wattenberg and Clifford (1964) discern that self-concept is a better predictor of achievement than intelligence tests. Further, they find that self-concept is more closely associated with achievement in older children than in younger children. Similar findings are revealed by Paschal (1968) and Caplan (1969). Additional studies have also revealed a positive relationship between self-concept and achievement (Piers & Harris, 1964; Green & Farguhar, 1965; McCandles, 1967; Davidson & Greenberg, 1967; Glasser, 1969). Thus, the literature shows that a student's self-concept is closely related to achievement and is comprised of parts which together form the total self-concept.

METHODOLOGY

Sample

The current study was based upon an initial random sample of 248 tenth graders representing all 22 high schools within the Atlanta Public Schools (APS). All students within the sample were first-time takers of the GBST at the beginning of the 1983-84 school year. This group was of special interest because they were members of only the second graduating class to be bound by the state's high school exit exam. Special education and bilingual students, though also bound by the state's graduation policy, were excluded from the sample since they represented a special population. Although the initial sample comprised 248 students, the sample which served as the basis for the statistical analyses varied depending upon the number of missing cases. The sample size, therefore, will be identified separately for each analysis.

Procedure

Approximately two to three weeks before the fall 1983 administration of the GBST, tenth-grade APS counselors were requested to coordinate the administration of the Piers-Harris Children's Self-Concept Scale (P-H) to sample students in each APS high school. The counselors were given the option of administering the self-concept scale personnally or enlisting the assistance of language arts teachers to whom the students were assigned. If the latter option were adopted, the self-concept scale was administered during the regular language arts class period. In either instance, the self-concept scale was administered in one 50-minute class period.

Schools were requested to complete the administration of the self-concept scale within a designated one-week period. Guidelines for administering the scale were provided for each school in appropriate quantities, along with a sample test item and instructions for students, test booklets, and preprinted computer answer sheets. The guidelines for administering the scale and the sample test item and instructions for students were designed to facilitate the uniformity of the testing procedures across the various school sites.

The P-H was selected specifically because of its high reliability in measuring self-concept as a total construct ($r = .80$), its appropriateness for analyzing various subcomponents of self-concept, and its ease of administration. In addition to a total score, the self-concept scale also provides subscale scores in the following six domains: (1) behavior; (2) intellectual and school status; (3) physical appearance and attributes; (4) anxiety; (5) popularity; and (6) happiness and satisfaction. Students' performance on the total scale, as well as the intellectual and school status subscale measuring academic self-concept, were of special interest given the objectives of the study.

The self-concept scale was administered to the same sample of students at three strategic points in time during the 1983-84 school year: (1) before they were initially administered, the state exit exam, which was considered a neutral period; (2) immediately

after students received the fall 1983 results, which was considered a high-anxiety period for students who failed either one or both portions of the tests; and (3) two months after receipt of the exit-exam results.

The third administration of the self-concept scale, which was scheduled for the month of February, was viewed as a check point for validating the initial posttest results. There was an interest in knowing whether students' immediate reactions as reflected by self-concept scores were temporary or sustained. However, the third administration of the P-H scale actually came just prior to the spring 1984 administration of the state exit exam. (The exit exam is given twice during the school year. Thus, the third administration of the self-concept scale represented another potentially high-anxiety period for students who failed the tests during the fall administration, in contrast to original expectations.

Research Hypotheses

The study was conceived as an exploratory project which was designed to test the following research hypotheses:

1. Passing status on the state exit exam will produce a significant difference in the self-concept scores of initial test-takers.

2. The self-concept scores of students who failed either one or both sections of the state exit exam will be significantly lower than the self-concept scores of students who pass both sections initially.

3. Passing status on the state exit exam will produce a significant difference in changes in students' self-concept scores over time.

Data Analysis

In order to test the research hypotheses, a two-way analysis of variance (ANOVA) was the statistical model used for data analysis. Initial self-concept and passing status on the state exit exam served as the independent variables for all analyses. The dependent variable varied in accordance with the research hypothesis being tested.

Students' initial self-concept was based upon total scores on the P-H obtained a week or two prior to the first administration of the state exit exam for these students. As noted above, the self-concept scale was administered at three strategic points during the 1983-84 school year. The first administration of the self-concept scale served as a pretest measure; the second administration of the self-concept scaled served as a posttest measure. The third administration was designed to serve as a validation of the posttest results.

In order to control for students' initial self-concept prior to taking the state exit exam, total self-concept scores obtained prior to the first administration of the exam were used to categorize the sample of 248 tenth graders as either high self-concept students or low self-concept students. The median total score on the pretest administration of the self-concept scale was 67.57 out of a possible score of 82. Students having total self-concept scores in September which were at or above the median total score for the sample were categorized as high self-concept students. Those having total self-concept scores which were below the median for the sample were categorized as low self-concept students.

The P-H is an 80-item test yielding a maximum score of 80, provided only the total test score is calculated. However, if the six subtest scores are summated to produce a total score, the maximum score is 82. In one or two instances, the same item is used to measure more than one subscale. Since students' performance on both the total test and the subtest measuring academic self-concept were of primary interest, the latter method was used to calculate the total scores, yielding a maximum score of 82 instead of 80.

The second independent variable, passing status, was based upon students' initial performance on the exit exam. The exit exam is comprised of two skill areas: reading and mathematics. For both skill areas, the minimum scale score is 200 and the maximum scale score is 400. A scale score of 300 is passing. Tenth-grade students bound by the state's current graduation requirement must obtain a passing score in both skill areas by

the end of their senior year in order to obtain a high school diploma. For the purposes of this study, passing status was operationalized in the following manner: (1) those who initially passed both skill areas; (2) those who initially failed one skill area; and (3) those who initially failed both skill areas.

FINDINGS

Hypotheses 1 and 2

In order to test the first research hypothesis that passing status on the state exit exam would produce a significant difference in the self-concept scores of first-time examinees, students' results from the second self-concept administration were analyzed using a two-way ANOVA model. The second administration of the self-concept scale occurred within a two-week period after students received their first exit-exam results. Total self-concept scores and scores on the academic self-concept subscale were each used as a dependent variable in two separate analyses.

Due to a large number of missing cases for the second administration of the self-concept scale, data were obtained for 146 students of the initial sample. When total scores on the self-concept scale were used as the dependent measure, both initial self-concept ($F = 50.46$, $df = 1,140$) and passing status ($F = 5.92$, $df = 2,140$) were significant beyond the .01 probability level.

A follow-up comparison using the Tukey-HSD procedure confirmed the second research hypothesis. The total self-concept scores for students who passed both skill areas on the first attempt were significantly higher ($p \leq .05$) than that of students who failed either one or both of the skill areas, regardless of initial self-concept. Although the number of students within the three status groups varied, Bartlett's test on the within-cell variances yielded a X^2 of 2.354 ($p = .095$), thereby, supporting the homogeneity of variance assumption. Group means are listed in Table 1.

TABLE 1

TOTAL SELF-CONCEPT SCORES OF FIRST-TIME EXAM TAKERS UPON IMMEDIATE RECEIPT OF EXIT-EXAM RESULTS

Passing Status	N	Mean Self-Concept	SD
Passed both sections	86	69.07*	10.58
Failed one section	39	64.21	12.73
Failed both sections	21	58.57	14.82
TOTAL	146	66.26	12.36

*$p \leq .05$

The significance of the main effect for the initial self-concept factor supported an underlying assumption that students who were categorized as having a high self-esteem (self-concept) would maintain a high self-concept score regardless of passing status. The mean total self-concept score for high self-esteem students was 72.53 (n = 75). The mean total self-concept score for low self-esteem students was 59.63 (n = 71).

There was a significant interaction between initial self-concept and passing status ($F = 3.424$, $df = 2,140$, $p < .05$) when students' performance on the academic self-concept subscale was used as a dependent measure. Therefore, students' academic self-concept immediately after receiving their first exit-exam results seems to be a function of their self-concept prior to the exam. An examination of the cell means revealed that the academic self-concept of high self-esteem students who failed one of the two skill areas was most similar to high self-esteem students who passed both sections of the state exit exam. However, the academic self-concept of low self-esteem students who failed one of the two skill areas was most similar to the low self-esteem students who failed both sections of the exit exam. (See Table 2.)

TABLE 2

ACADEMIC SELF-CONCEPT SCORES OF FIRST-TIME EXAM TAKERS UPON IMMEDIATE RECEIPT OF EXIT EXAM RESULTS

Group	N	Mean Academic Self-Concept		
		Passed Both	Passed One	Failed Both
High self-esteem	75	15.75	15.20	12.00
Low self-esteem	71	12.95	10.42	10.50

(Note: Minimum score = 5; maximum score = 17)

Hypotheses 3

A test of the third research hypothesis regarding the impact of initial passing status on temporal changes in students' self-concept was conducted using a two-way ANOVA. The dependent variable in this instance was the difference in self-concept scores obtained by comparing the second and third administration of the P-H scale. Differences in total self-concept scores were obtained for the 129 students of the initial sample for whom scores were available both immediately following the receipt of exit-exam results and again two months later. As noted earlier, the third administration of the self-concept scale occurred just prior to the spring administration of the state exit exam. Although the third administration of the scale was designed to serve as a neutral period, it was in fact a potentially high-anxiety period for those students who failed either one or both skill areas during the fall 1983 administration of the exam.

An analysis of the difference scores based upon changes in students' total self-concept, as well as changes in the academic self-concept, were conducted using two separate ANOVA analyses. As in the previous statistical tests, initial self-concept and passing status after the first administration of the exam continued to serve as the independent variables.

There was a significant difference in the mean change in both total self-concept ($F = 3.744$, $df = 2,123$, $p < .05$) and academic self-concept ($F = 5.189$, $df = 2,123$, $p < .01$)

due to students' initial passing status on the exit exam. A follow-up comparison using Tukey-HSD procedure revealed that there was a significant increase ($p \leq .05$) in both the total and academic self-concept scores of students who failed both sections of the exit exam, when compared to the other two status groups (see Tables 3 and 4).

TABLE 3

MEAN CHANGE IN TOTAL SELF-CONCEPT SCORES OVER TWO-MONTH PERIOD

Passing Status	N	Mean Change	SD
Passed both sections	78	-.54	10.30
Failed one section	32	2.78	12.16
Failed both sections	19	7.05*	10.50
TOTAL	129	1.40	10.82

*$p \leq .05$

As in previous analyses, Bartlett's test of within-cell variances substantiated that the homogeneity of variance assumption had not been violated, despite differences in group size ($F = .646$, $p = .525$ for differences in total self-concept; $F = 110$, $p = .895$ for differences in academic self-concept). Cell means are shown in Tables 3 and 4.

TABLE 4

MEAN CHANGE IN ACADEMIC SELF-CONCEPT SCORES OVER TWO-MONTH PERIOD

Passing Status	N	Mean Change	SD
Passed both sections	78	-.17	2.45
Failed one section	32	.84	2.49
Failed both sections	19	1.84*	2.67
TOTAL	129	.38	2.58

*$p \leq .05$

SUMMARY AND DISCUSSION

Each of the three research hypotheses was supported by the study. After controlling for students' initial self-esteem prior to taking the state exit exam, the mean total self-concept score of students who failed either one or both sections of the exit exam was found to be significantly lower than the mean total self-concept score of students who initially passed the exam. The academic self-concept of high self-esteem students who failed one of the two skill areas was most similar to that of high self-esteem students who successfully passed both sections of the exit exam. However, the academic self-concept of low self-esteem students who failed one of the two skill areas was most similar to that of low self-esteem students who failed both sections of the exit exam.

A key finding of the study involves differences in the academic self-concept of students who fail one of the skill areas assessed by the exit exam. One issue which results is whether a larger percentage of high self-esteem students who initially fail one portion of the exit exam are more successful in passing the remaining section of the exam than low self-esteem students in the like status category. Another issue to be explored is whether there is any correlation between academic self-concept and the specific skill area failed (i.e., reading or mathematics).

A second finding which provides a basis for further study involves differential changes in self-concept and students' initial passing status on the exit exam. The study's findings reveal that there is a significant increase in both the total and academic self-concept scores of students who initially fail both sections of the exit exam when measured two months later. This finding is of particular interest since the last set of self-concept scores were obtained just prior to the second administration of the exit exam for the 1983-84 school year. Students who initially fail both sections of the exam have the most at stake in taking the test a second time. Thus, their significant increase in self-concept scores during the interim between administrations of the exit exam is possibly functional in retaking the exam. Lastly, an issue suggested for inquiry by further

research is the impact that repeated exit-exam failure has upon the initial resilience in students' self-concept. Or stated differently: Will students who fail both sections of the exit exam continue to experience only a temporary decrease in self-concept? Is there a time at which repeated failure of the exit exam produces a sustained decrease in students' self-esteem? With the proliferation of exit exams being implemented throughout the country, answers to these questions are critical to the future psycho-social development of students who are unable to overcome this hurdle.

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